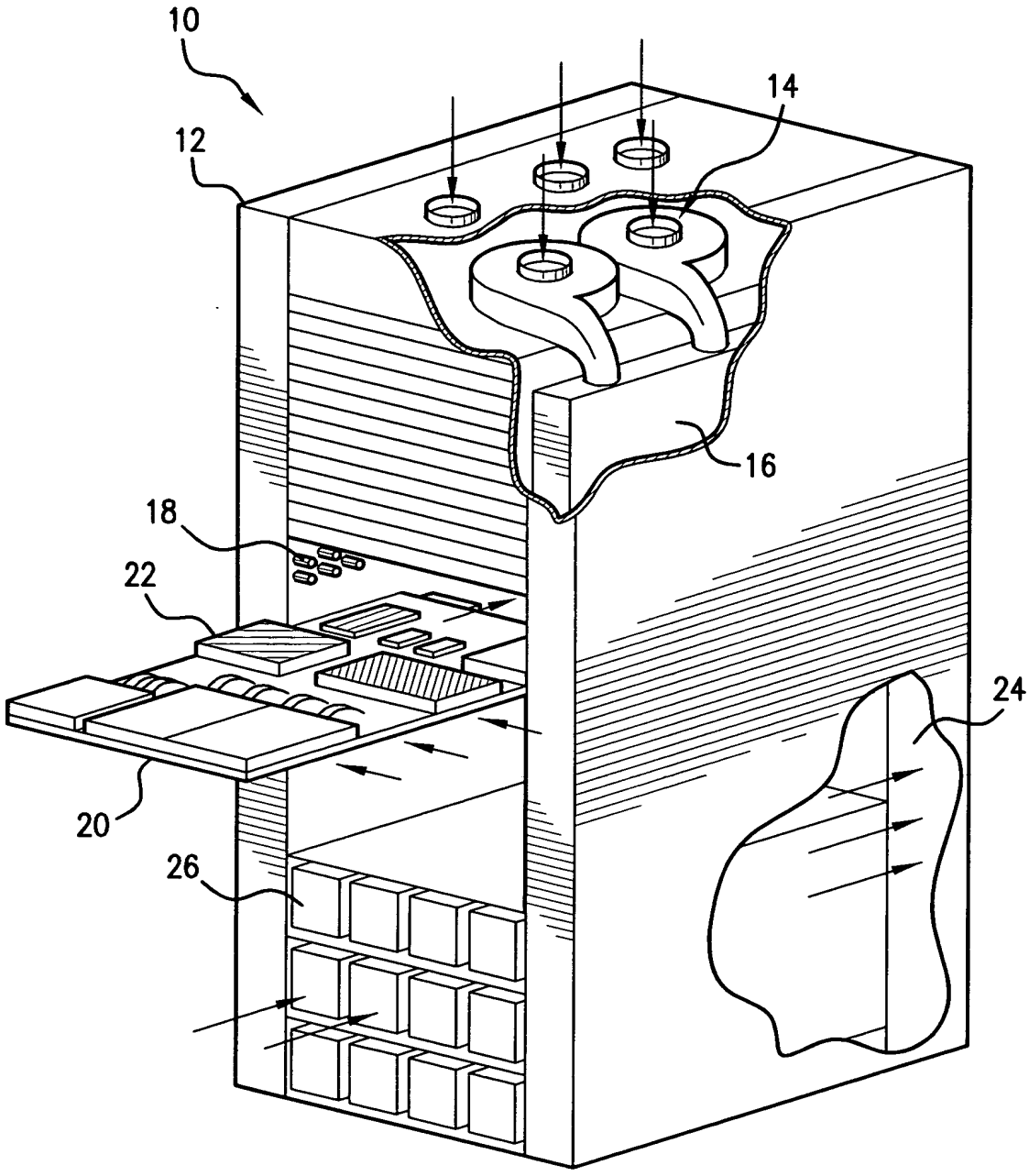

FIG.1

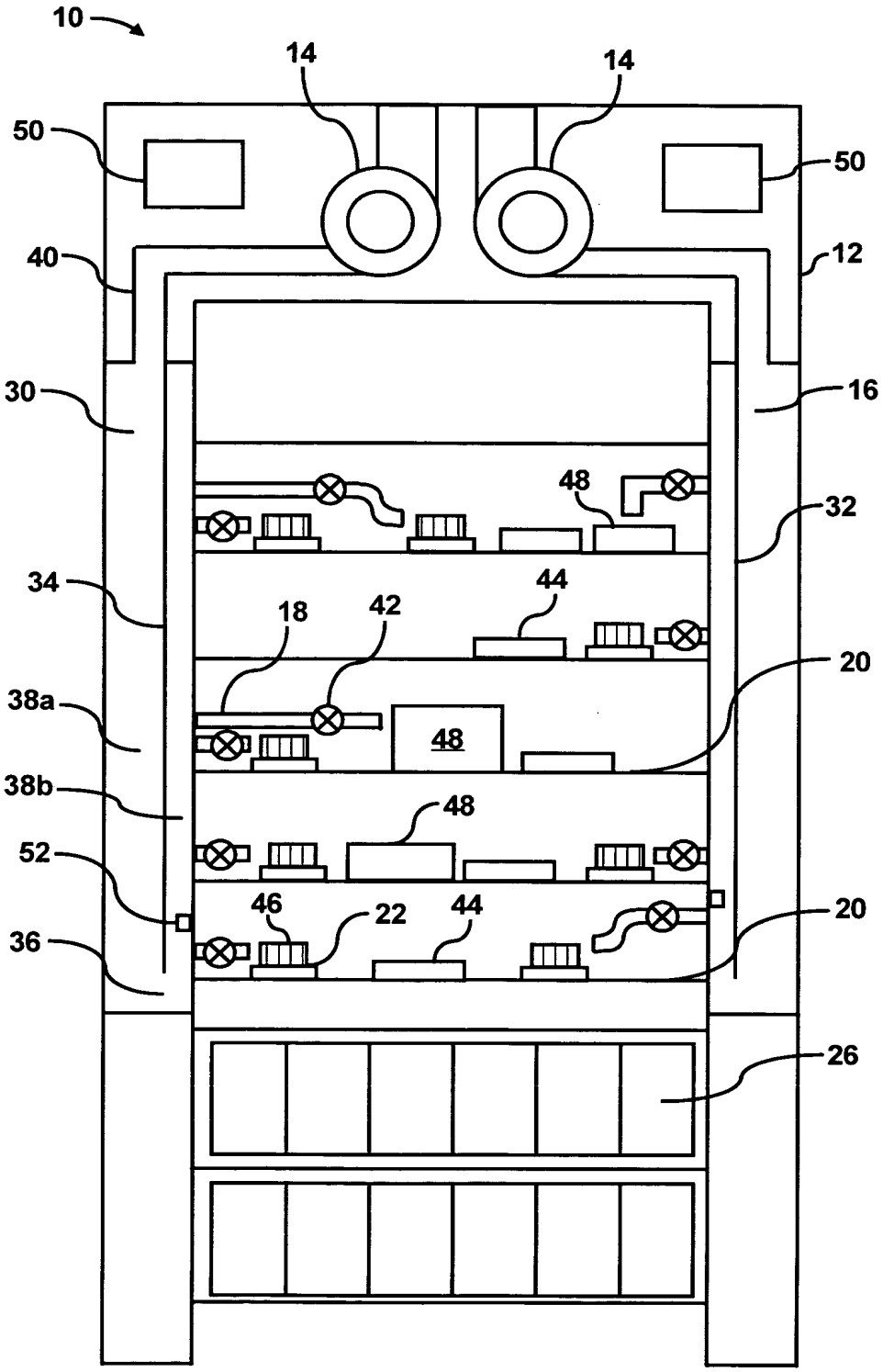
10
14
14
50
50
40
12
30
16
48
32
34
44
18
42
20
38a
48
38b
48
52
46
22
44
20
36
26

FIG. 2

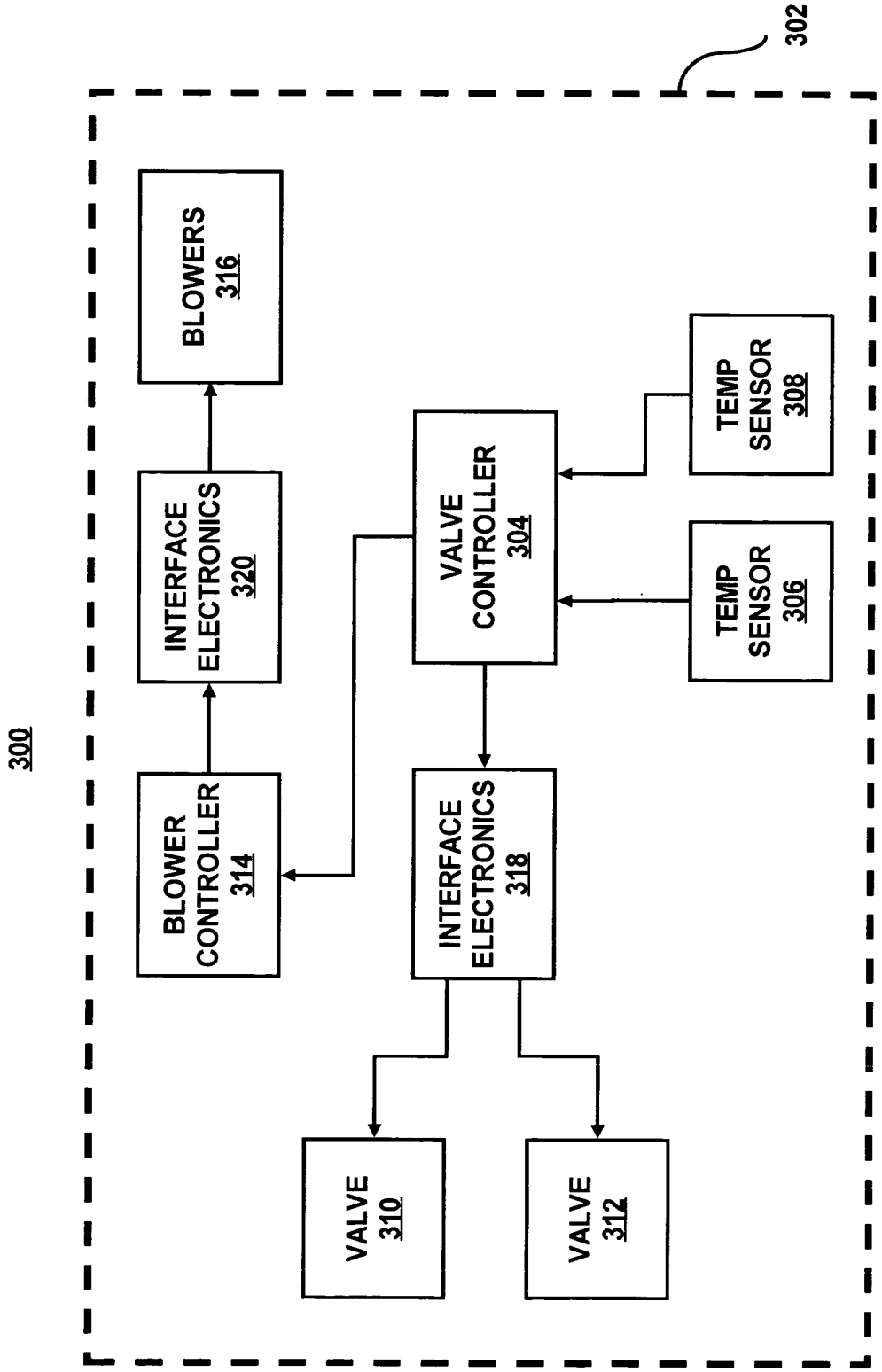
300
302
BLOWERS 316
INTERFACE ELECTRONICS 320
BLOWER CONTROLLER 314
VALVE CONTROLLER 304
TEMP SENSOR 308
TEMP SENSOR 306
INTERFACE ELECTRONICS 318
VALVE 310
VALVE 312

FIG. 3

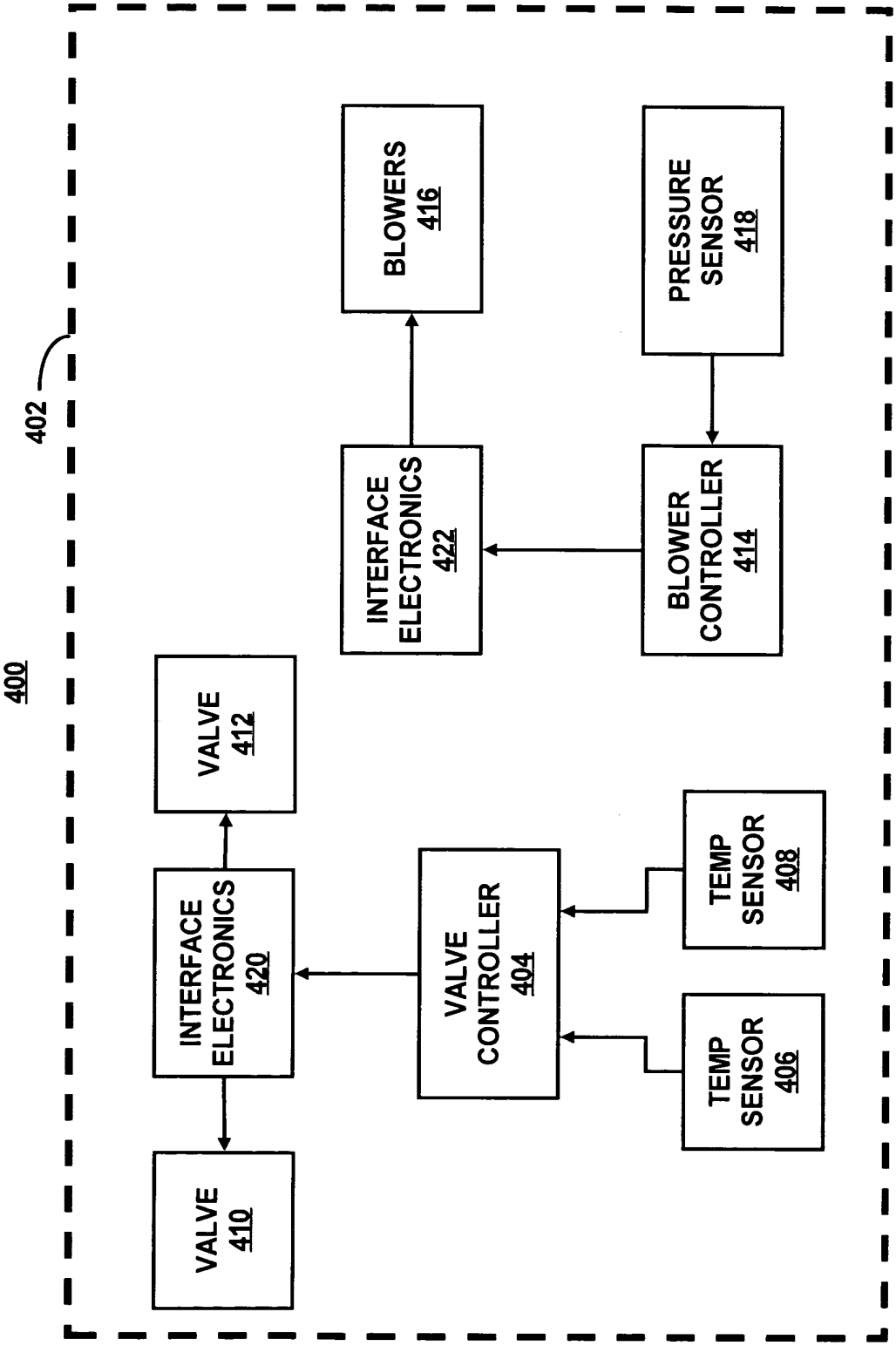
400
402
BLOWERS 416
PRESSURE SENSOR 418
INTERFACE ELECTRONICS 422
BLOWER CONTROLLER 414
VALVE 412
INTERFACE ELECTRONICS 420
VALVE CONTROLLER 404
TEMP SENSOR 408
TEMP SENSOR 406
VALVE 410

FIG. 4

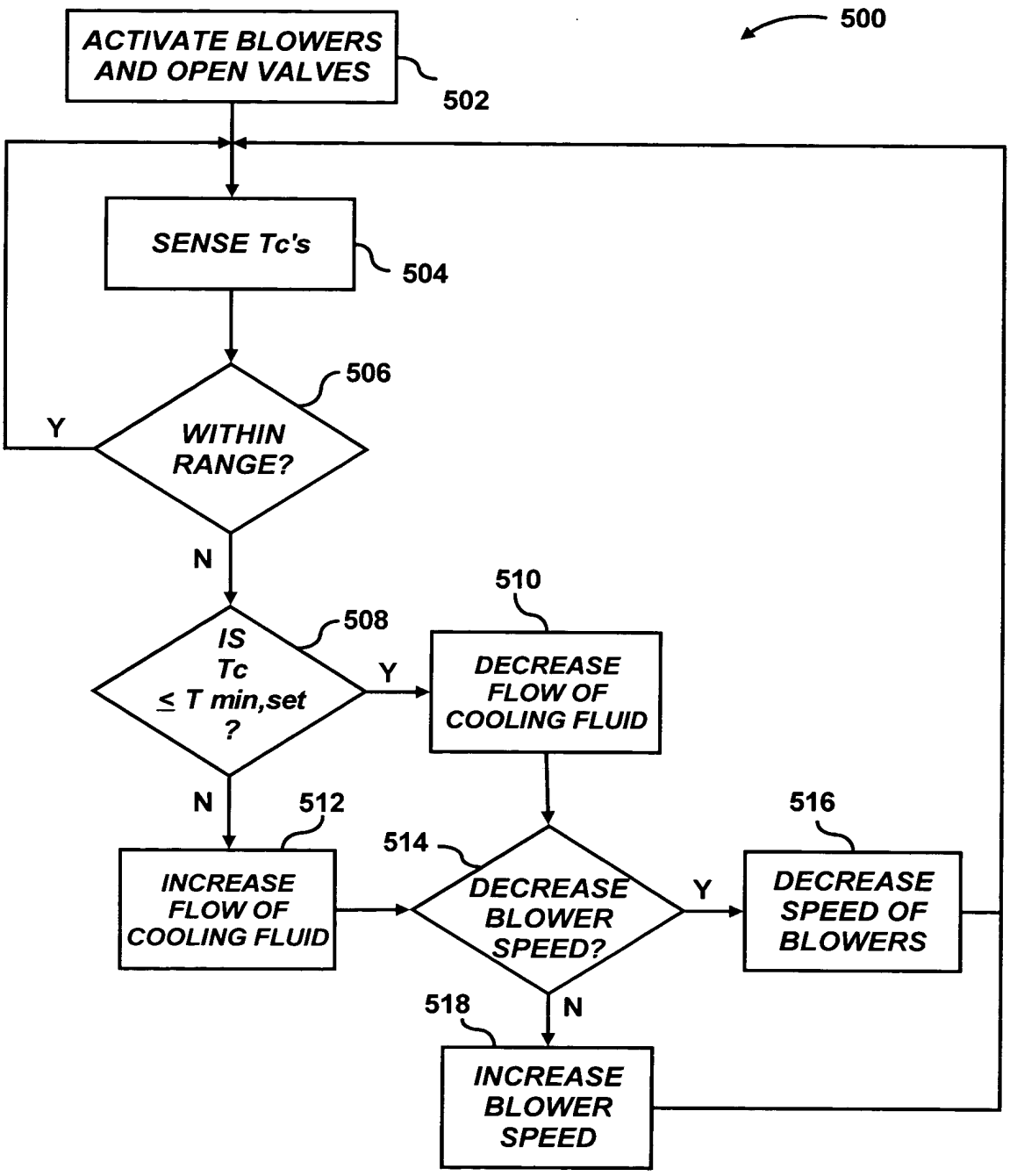
500
ACTIVATE BLOWERS AND OPEN VALVES
502
SENSE Tc's
504
506
WITHIN RANGE?
Y
N
508
IS Tc ≤ T min,set ?
Y
510
DECREASE FLOW OF COOLING FLUID
N
512
INCREASE FLOW OF COOLING FLUID
514
DECREASE BLOWER SPEED?
Y
516
DECREASE SPEED OF BLOWERS
N
518
INCREASE BLOWER SPEED

FIG. 5

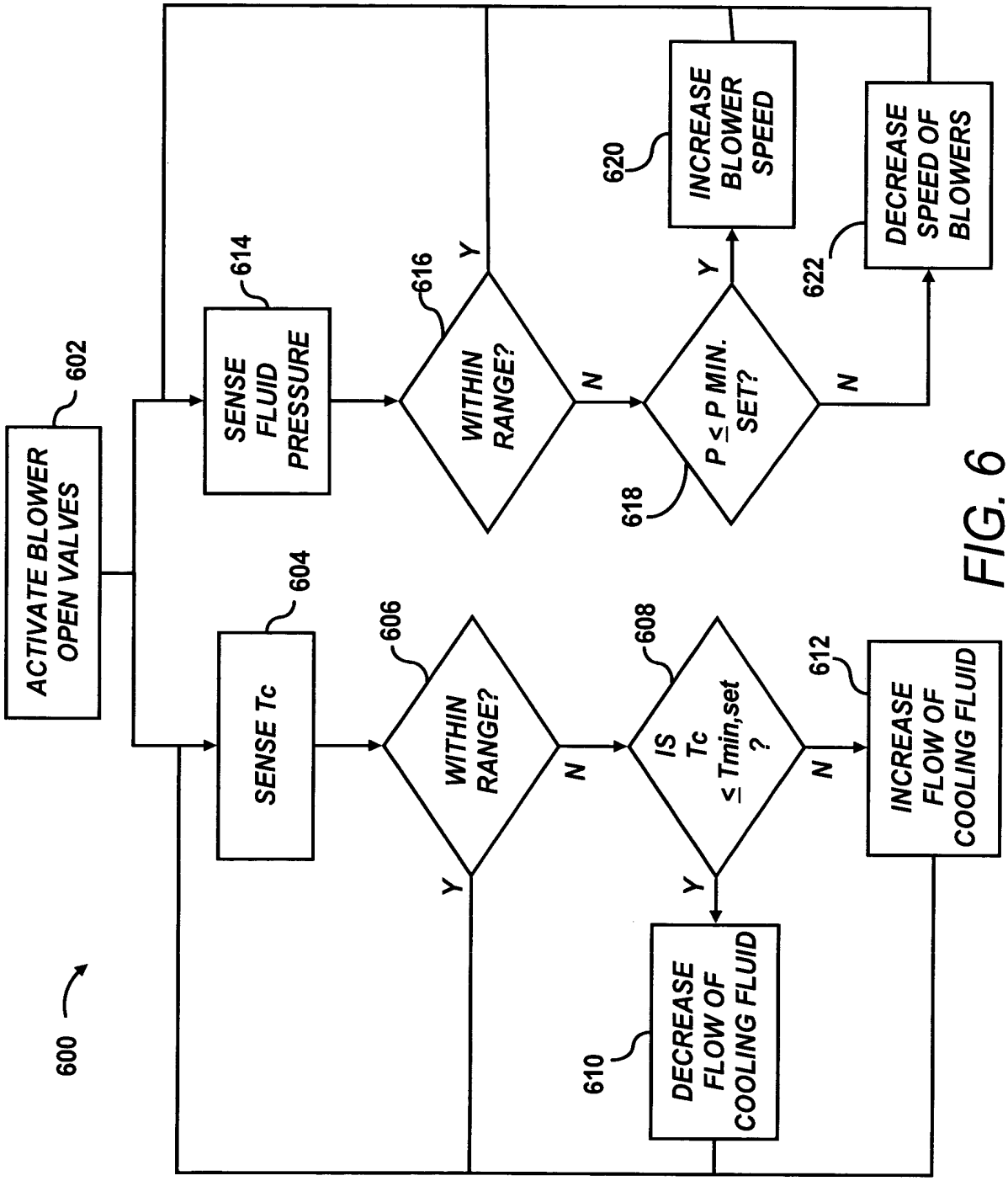
600
ACTIVATE BLOWER OPEN VALVES
602
SENSE Tc
604
WITHIN RANGE?
606
IS Tc ≤ Tmin,set ?
608
DECREASE FLOW OF COOLING FLUID
610
INCREASE FLOW OF COOLING FLUID
612
SENSE FLUID PRESSURE
614
WITHIN RANGE?
616
P ≤ P MIN. SET?
618
INCREASE BLOWER SPEED
620
DECREASE SPEED OF BLOWERS
622
Y
N

FIG. 6